MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO: Commissioners Mital, Simpson, Helgeson, Manning and Brown

FROM: Dave Churchman, Manager Power Operations

DATE: February 20, 2015

SUBJECT: 2015: Annual Power Market Update

OBJECTIVE: Information Only

Issue

The purpose of this backgrounder is to provide an annual update of power market conditions and hedging activities.

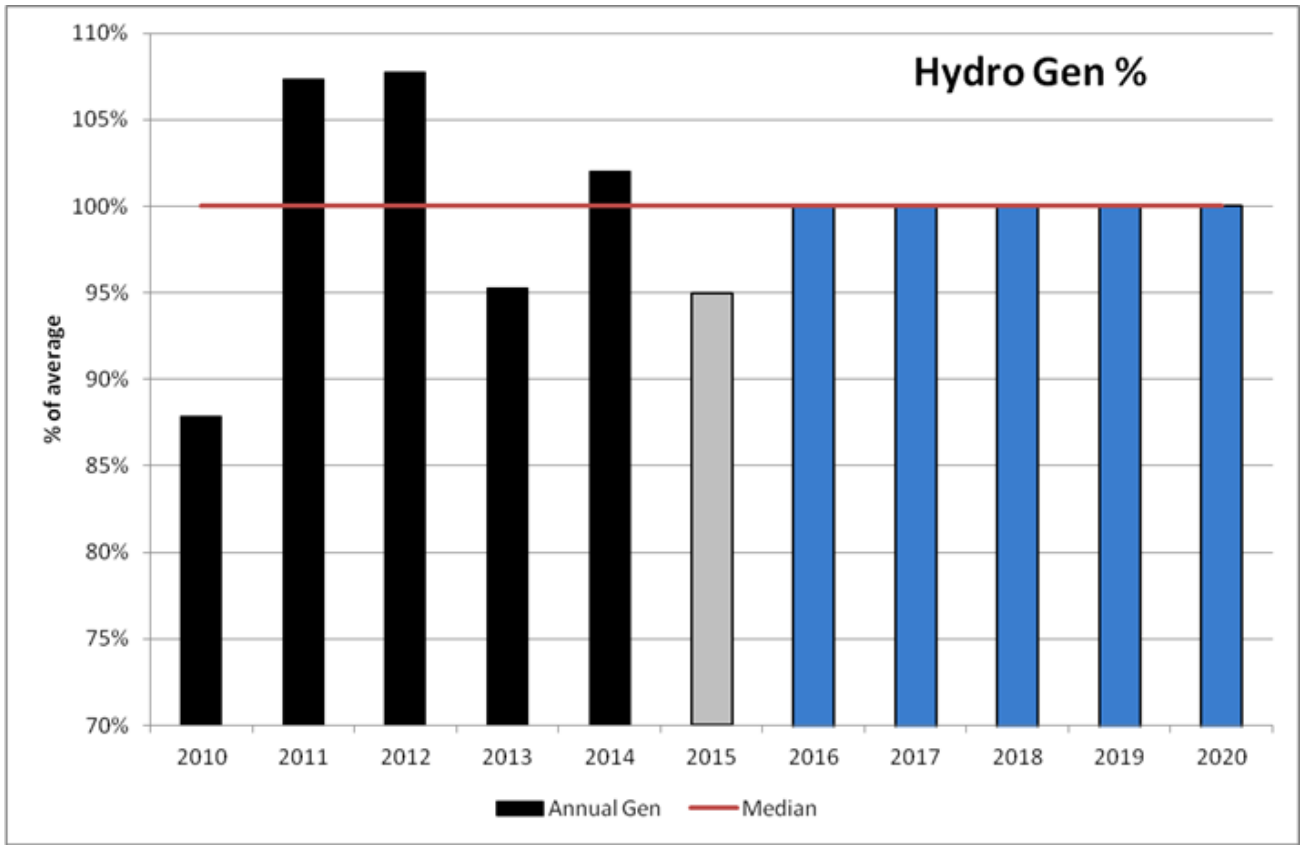
Background

The Power Operations department executes hedge trades consistent with utility financial objectives and in accordance with Board Policy contained in SD8, and as further described in the EWEB Energy Risk Management Procedures.

Discussion

EWEB Hydro Generation Update

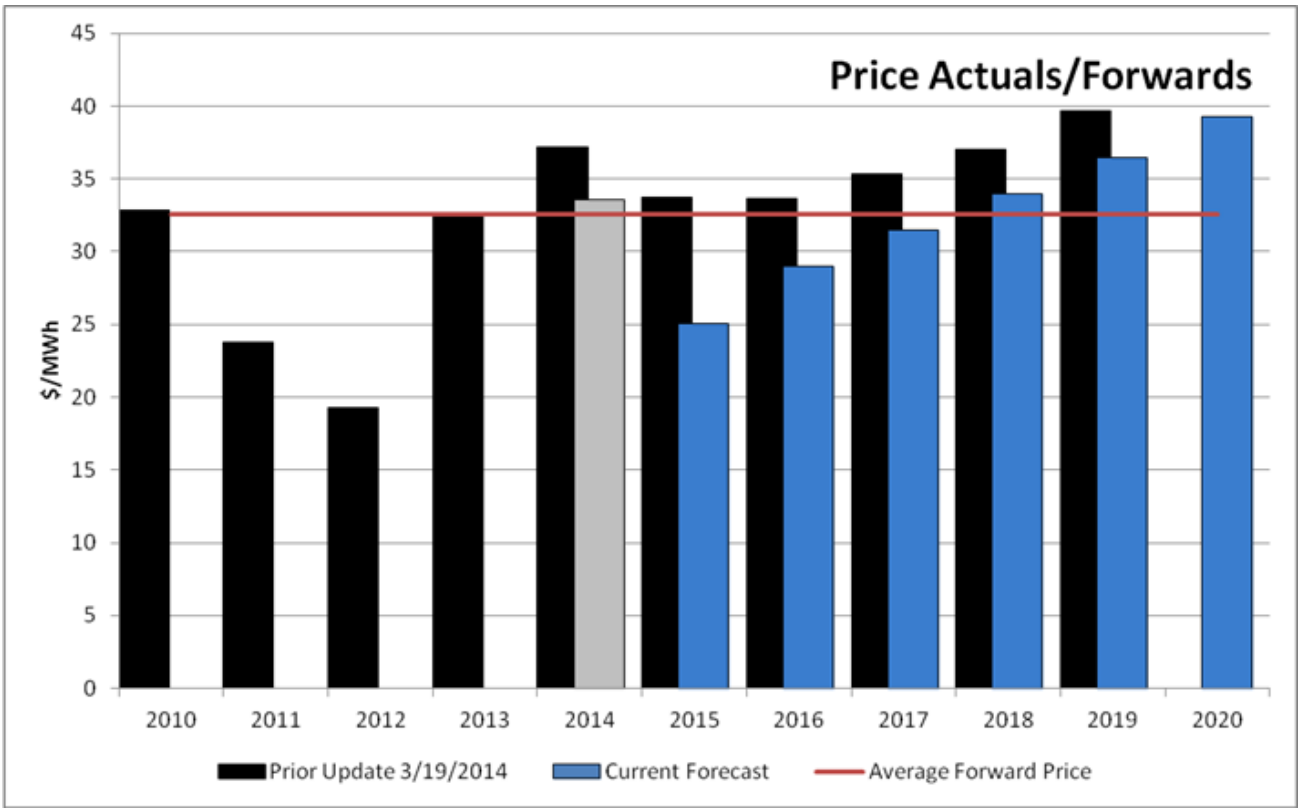
The EWEB hydro season has had a fair start. Precipitation is close to normal after an early Feburary storm which impacted much of the Columbia River Basin. However, due to continued warm temperatures, snowpack is increbily low, especially in the Oregon and Washington cascades. This has the effect of boosting near term generation at the expense of late season generation. EWEB's hydro gen forecast includes both EWEB owned generation (Carmen Smith, Trailbridge, Walterville, Leaburg, and Smith Creek) and contracted Slice generation from Bonneville Power Administration. EWEB owned and Slice generation are currently projected to be 95% of average (expected) generation for 2015. The generation forecast is normally somewhat lower than the hydro forecast as some of this water will be spilled during the spring runoff period to assist in anadromous fish migration.



Market Price Update

Market prices fell sharply in the latter half of 2014 as natural gas prices moved downward in response to increased natural gas supply and consumer energy demand remained soft. Prices through the first two months of the year have remained low as unseasonably warm temparatures led to above average runoff and below normal loads. Though current 2015 prices are lower than 2013 and 2014, we have not yet reached the level the region experienced in 2012. Prices beyond 2014 continue to trend upward but have fallen in response to lower natural gas prices and increased renewable resources coming onto the market. Utility generated solar in California reached nearly 5,000 mw of generation in 2014 (http://www.eia.gov/todayinenergy/detail.cfm?id=16851).

In the chart below, prior prices are an average of daily prices throughout the course of the year. Future prices reflect the market price that can be transacted right now for delivery in those future years.

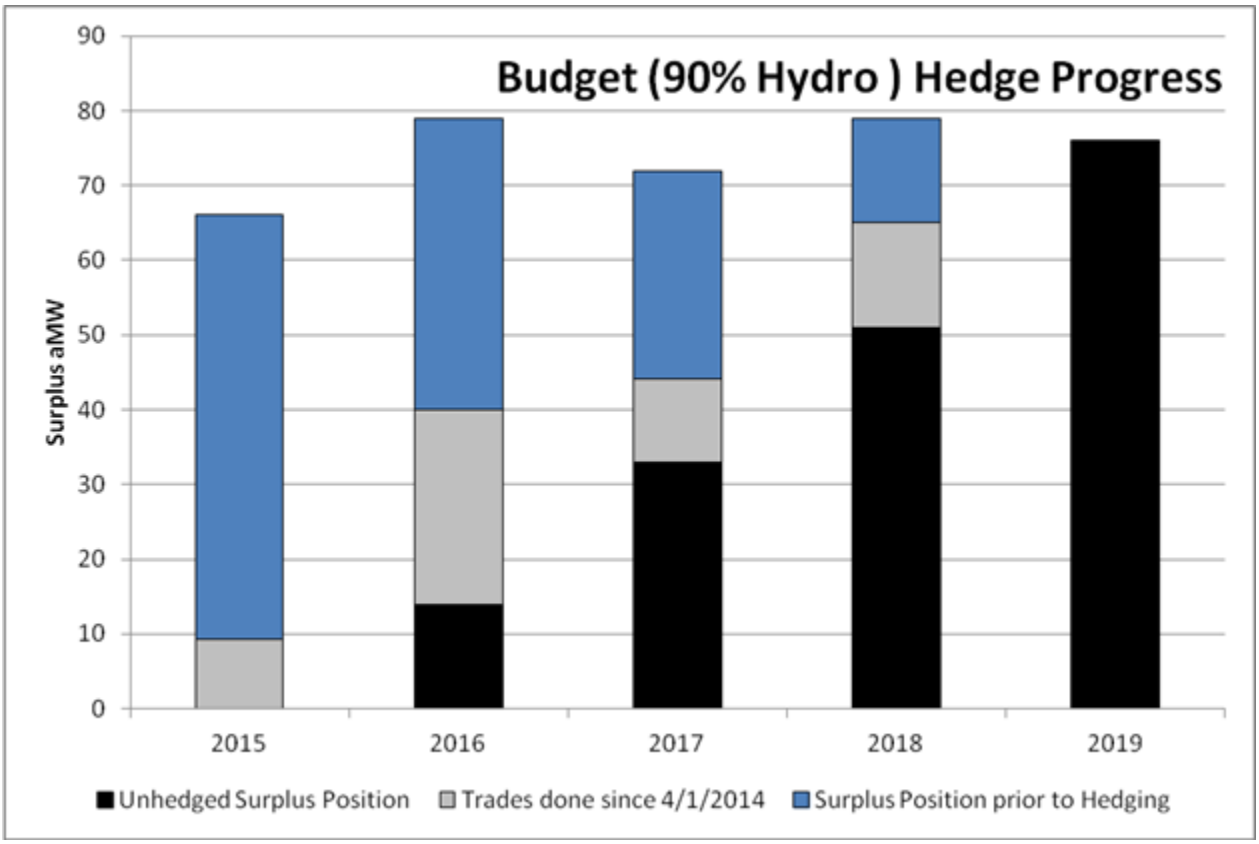


Surplus Positon Hedging Update

The chart below shows EWEB's surplus power position for 2015-2019. The top of the chart indicates EWEB's original surplus position. The gray band represents sales made since March, 2014. The black band represents still unhedged energy surplus.

The Trading Floor sells a portion of EWEB's surplus position up to five years in advance. This provides two benefits: 1) it provides the opportunity to sell surplus energy at higher prices relative to near term years; and 2) it results in sales executed at various times which diversifies the sales price by dollar cost averaging through time. This strategy results in near term years being fully hedged while year five is the least hedged, with interim years somewhere in between. Beyond five years the Trading Floor does not hedge any surplus energy. This surplus energy is based upon 90% hydro planning. If we receive expected hydro those additional surpluses are sold within the current water year.

The value of all executed hedges from this point forward is approximately $15M when compared to prices at which we could hedge today. Said another way, EWEB has benefited by $15M compared to not hedging at all for the period from today through 2018.



Risk Management Review

EWEB's Risk Management Committee (RMC) has initiated a process to more clearly define EWEB's power supply risk management objectives, review current power related financial exposure, and determine whether existing policy is adequate and effective. As part of this effort, staff will evaluate the impact of volatility in EWEB's hydro generation, wholesale market prices, and retail sales.

Current risk policies and financial practices such as the 90% of normal generation assumption for planning were established when wholesale power prices were higher and power related risks were dominated by generation uncertainty. Now, with lower prices, generation risk has decreased substantially while retail sales risk has increased substantially. For example when retail sales fall EWEB must sell additional surplus generation at wholesale prices much lower than retail rates. Given the changes described above the RMC has asked staff to review existing policies and practices to determine if they are still providing EWEB effective financial stability.

Requested Board Action

This memo is for informational purposes. No Board action is requested.

MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO:	Commissioners Mital, Simpson, Helgeson, Manning and Brown
FROM:	Lance Robertson, Public Affairs Manager, and Jason Heuser, Legislative Affairs Coordinator
DATE:	February 20, 2015
SUBJECT:	Federal Issues for 2015 American Public Power Association (APPA) DC Rally
OBJECTIVE:	Information Only

Issue

EWEB is a member of the American Public Power Association. APPA invites elected officials and public power professionals from APPA member utilities to attend its annual APPA Legislative Rally in Washington, D.C., to engage and educate decision-makers in Congress and federal agencies.

Background

EWEB maintains ongoing two-way communication with members of Congress and members of their staff both in DC and in-state. However, much of EWEB's advocacy occurs during in-state meetings, and by phone, email and letter. The APPA legislative rally is an opportunity for EWEB elected officials and staff to make use of effective face-to-face in-person advocacy and relationships with Members of Congress and their staff members, as well as to influence APPA legislative positions during the APPA resolutions committee meeting. Commissioner Steve Mital will be attending the March 9-11 rally on behalf of EWEB, accompanied by EWEB Legislative Affairs Coordinator Jason Heuser, and will join with other Oregon utility members of the Public Power Council (PPC) in meetings on with the Oregon Congressional Delegation.

Discussion

Tentatively, EWEB will be joining fellow APPA and PPC members in advocacy meetings on the following federal issues:

- The Columbia River Treaty (PPC Briefing Paper attached)
- BPA Rates and Policy Review (PPC Briefing Paper attached)
- Hydropower and Fish and Wildlife Issues (PPC Briefing Paper attached)

Other issues that may be addressed in exchanges with Congressional offices include:

- Preserving tax-exempt municipal bonds (APPA Briefing Paper attached)
- Oregon feedback on the US Environmental Protection Agency's Clean Power Plan under Section 111(d) of the Clean Air Act
- Federal Carbon Cap-and-Trade/Tax Legislation

Recommendation/Requested Board Action

This memo is for informational purposes. No Board action is requested.

Public Power Council
825 NE Multnomah, Suite 1225
Portland, OR 97232
(503) 595 - 9770
www.ppcpdx.org

The Columbia River Treaty

February 2015

The Columbia River Treaty is an agreement between Canada and the United States guiding the development and operation of some water resources in the Columbia River Basin for flood control and power needs. The Treaty was first implemented in 1964. Either country may terminate most Treaty provisions on or after September 16, 2024 by providing a ten year advance notice. Some provisions terminate on that date without any action being taken.

Today, the Treaty is grossly imbalanced, with some estimates showing Canada receiving almost ten times the benefits that Northwest interests receive from coordinated system operations according to studies by the U.S. Army Corps of Engineers (ACOE) and Bonneville Power Administration (BPA), who serve as the U.S. Entity representing the United States in Treaty discussions with Canada. The ACOE operates many of the federal dams in the Columbia River basin. BPA markets federal hydropower, mostly to the preference utilities that make up the membership of the Public Power Council (PPC).

On December 13, 2013, the U.S. Entity sent its Final Recommendations on the Columbia River Treaty to the U.S. State Department. The document appropriately emphasizes the need to rebalance the sharing of power benefits. While an Interagency Policy Committee of the Administration has started consideration of this issue, *continued work and coordination are needed to encourage that committee and the State Department to act expeditiously on the region's recommendation.*

Treaty Impacts on Northwest Electricity Ratepayers

The Treaty obligates the United States to send an estimated $250 to $350 million in clean hydropower benefits annually to Canada (called the Canadian Entitlement). This cost is paid by electricity ratepayers in the Northwest receiving power from BPA and the Mid-Columbia PUDs, and has a clear impact on power rates paid in the Northwest.

Analysis by the federal agencies indicates that the U.S. does not receive much of the reciprocal benefit originally anticipated by this arrangement. Much has changed in the river system since the 1960s. In addition, much of the flood control allowance received from Canada expires in 2024 even if the Treaty continues. So, Canada will be looking to negotiate for payment for flood control measures. *And, meanwhile the U.S. would remain obligated to pay the Canadian Entitlement unless the Treaty is terminated or renegotiated.*

Treaty Recommendation: Moving Forward

It is incumbent upon the State Department and National Security Council– with guidance from the Northwest congressional delegation and regional stakeholders – to *expedite* review of the Columbia River Treaty so that the U.S. and Canada can begin to formally discuss the future of the Treaty. PPC continues to believe that if a reasonable outcome with Canada cannot be achieved soon, the United States must consider all available options including termination as was envisioned during the original Treaty negotiation and drafting.

The inequity to electricity ratepayers in the current Treaty implementation begs for correction as soon as possible. Rebalancing power benefits should be the top priority in Treaty negotiations. PPC wants to ensure that there is a fair and equitable arrangement for Northwest electricity consumers, and that federal negotiators stay focused on objective analysis of Treaty-related scenarios as the process moves forward.

In light of the extensive ecosystem effort underway pursuant to the Biological Opinion (BiOp) for the Federal Columbia River Power System and the BPA fish and wildlife program, it is critical that ecosystem measures discussed in the Treaty context are limited to issues truly international in scope. As with other regional efforts, ecosystem measures must be based on sound science, be subject to cost and benefit analysis, provide practicable, measurable outcomes, and not adversely impact electric system reliability or irrigation needs.

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Bonneville Power Administration Issues

February 2015

As consumer-owned utilities that have preference to federal power, most members of PPC buy much or all of their power from the Bonneville Power Administration (BPA) as well as using the Bonneville transmission system to deliver that power. Issues impacting the agency weigh heavily on these utilities, their consumers, and their ability to enable job creation throughout Washington, Oregon, Idaho, Montana, and parts of adjacent states.

BPA Mission

- BPA plays an integral role in the economic vitality of the Pacific Northwest.
- By law, the agency's first mission is to deliver – at cost – the clean, renewable hydropower that is generated at federal dams to the region's not for profit, consumer-owned electric utilities.
- BPA maintains the reliability of the electric grid and, within its statutory authority, helps advance deployment of energy efficiency and renewable generation, helps keep rates affordable for residential and small farm customers of the region's investor-owned utilities, and protects regional fish and wildlife resources.

BPA Budgets and Rates

- For most consumer-owned utilities served by BPA, the agency's charges constitute a majority of the cost of operating their utilities. Increases in BPA rates affect the pocketbooks of residents and the vitality of businesses.
- Currently, BPA is proposing a 6.7% average increase to power rates and a 5.6% average increase for transmission rates. This is on top of a 9% increase for power and 11% increase for transmission imposed for the last two-year rate cycle.
- Maintaining affordable rates is critical for the region, and it is also imperative that BPA plan for needed capital investments to maintain the reliability of its generation and transmission infrastructure. By continuing and expanding on recent budget prioritization efforts, we are looking for BPA to meet the dual goals of rate stability and infrastructure investment.

Energy Balancing

- The rise of intermittent renewable resources in the region – with BPA integrating more than 4,500 MW of wind generation – has prompted examination of various mechanisms that could be used to integrate these intermittent resources and efficiently share balancing reserves.

- The Northwest Power Pool has initiated a multi-step process to evaluate bilateral and market-based tools.
- Considerable effort has been focused on developing a voluntary, market-based mechanism, known as Security Constrained Economic Dispatch (SCED), as one potential tool.
- PPC is trying to ensure that the review process is both measured and thorough, and believes the adoption of any market-based mechanism should advance only if:
    - The economic benefits significantly outweigh the costs;
    - Regional independence is preserved and the effort does not cause, nor lead to, expanded FERC jurisdiction over BPA or public power activities;
    - The scope of the effort is narrowly drawn, and does not prompt "mission creep" or expansion to a full Regional Transmission Organization (RTO); and
    - Non-market mechanisms for various purposes – including bilateral agreements – remain effective options in the region.

Impact of Climate Policy on BPA

- Although BPA does not operate any sources that will be subject to EPA's proposed "Clean Power Plan," PPC is on the lookout for potential impacts and unintended consequences:
    - Any shift in generation could lead to greater demand placed on BPA's transmission system. It is essential that BPA's primary mission of delivering power from the FCRPS remains unimpeded and that direct beneficiaries pay for the use of the BPA transmission system.
    - Reliability of the electric grid is of paramount importance. Given the interconnected nature of the grid, even utilities without affected power plants can face reliability impacts. It is essential that any new regulations afford sufficient time to make needed infrastructure investments (new power plants, transmission lines, natural gas pipelines, etc.) so that reliability isn't impaired.
- The recent Council on Environmental Quality (CEQ) policy update directing federal agencies to consider the climate impact of their actions is a timely reminder that proposed changes to the output, operations and timing of the FCRPS – such as increased fish spill – would have a negative impact on climate change given that the carbon-free profile of the FCRPS generation would have to be replaced by other sources.

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(503) 595 - 9770
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Hydropower and Fish and Wildlife Issues

February 2015

Value of Hydropower in the Northwest

Hydropower from the Federal Columbia River Power System is a key economic driver for jobs in the Northwest. This efficient and renewable resource provides low-cost power without carbon emissions.

Hydro provides over 60% of the region's electrical generation capacity, and it makes up almost 90% of the generation within the Bonneville Power Administration's resource portfolio. As such, it is the primary resource used to serve electricity to the millions of customers of publicly and cooperatively owned utilities in the Northwest with preference rights to federal power.

The hydropower system in the Northwest also provides other key benefits that are part of our economy and way of life. These include provision of critical flood control, irrigation, navigation, and recreation.

Fish and Wildlife Considerations

PPC has long supported cost-effective actions to protect and enhance fish and wildlife in the Columbia River Basin, and has worked within the regional processes to advance alternatives that are scientifically sound and economically prudent.

Investments Paying Dividends— Since 1980, BPA customers have invested over $14 billion in Endangered Species Act and other statutory fish and wildlife obligations (not including other efforts that utilities fund in addition to the BPA programs). Because BPA recovers all of its costs through rates, PPC members have contributed an enormous amount towards salmon recovery and wildlife mitigation in the region. **About 30% of the power cost charged by BPA is attributable to fish and wildlife measures.**

While there is plenty of room for further efficiency and improvement, these efforts are showing significant success. Twelve of the thirteen ESA-listed salmon and steelhead populations in the Columbia River Basin are showing striking improvement, and there are more salmon and steelhead returning now than at any time since the first federal dams were constructed in 1938. An estimated 2.7 million adult salmon and steelhead returned past Bonneville Dam in 2014. The most recent 10-year average return for salmon and steelhead was 1.6 million fish.

New measures and infrastructure have increased survival of fish passing through the federal hydro system. In addition, spawning and rearing habitat has improved in many tributaries, and hatchery

programs are being modified to reduce impacts on wild fish. Long term, the strength of these populations is increasingly dependent upon continued improvement of ocean conditions, reduced harvest of wild fish, and adequate protection of available habitat.

NOAA Supplemental BiOp

In January, 2014, NOAA Fisheries released the latest iteration of the Federal Columbia River Power System Biological Opinion (FCRPS BiOp). We are pleased that the updated salmon plan continues to emphasize the best available science to protect listed species and continues the path of progress seen over the past decade.

The updated plan:

- Meets the U.S. District Court's requirement that NOAA submit an amended plan that specifies additional habitat action.
- Builds on the success of the existing plan, which NOAA found has yielded positive results.
- Does not result in further significant degradation of the generating capability of the FCRPS.

Plaintiffs in the BiOp proceedings have again filed suit and the latest iteration of the BiOp will be litigated in 2015.

Proposed 10-Year Experimental Spill Test Fatally Flawed

Over the past two years, some parties have sought to radically increase the current program of spilling water over the dams. On proposal was for a 10-year experimental test to dramatically increase spill at all eight federal projects in the FCRPS. The proposed test would:

- Increase the total dissolved gas cap beyond state and federal limits to levels that could seriously harm or kill salmon and other aquatic species.
- Cost ratepayers more than $1 billion to implement at a time when many residents already struggle to pay their electricity bills.
- De-rate the hydro system by another 600 average megawatts (beyond the 1,000 average megawatts lost already under current spill agreements), thereby threatening system reliability and hampering the ability to integrate intermittent resources.
- Add 1.9 million additional tons of carbon dioxide into the atmosphere from combustion turbines needed to replace lost hydro generation.

That spill proposal was based on a study that has been found fundamentally defective during independent review, and NOAA Fisheries rejected the proposal from inclusion in the BiOp because of substantial weaknesses in the analysis and numerous harmful effects. The above statistics are from a preliminary analysis released by the Bonneville Power Administration.

In summary: the framework of the current collaborative process for Northwest salmon is working as it should. Fish runs remain high and juvenile survival targets have been met or are close to being met. New extreme measures would be harmful and are not needed to achieve regional goals.

REGIONAL FISH STATUS AND BIOP FACTS

Fish Populations are Returning in Robust Numbers

- **There are more salmon and steelhead returning to the Columbia River Basin now than at any time since the first federal dams were constructed in 1938.**[i]
- In the last five years, most salmon and steelhead populations originating above Bonneville Dam have shown increasing population trends.
- **An average of 1.6 million salmon and steelhead returned past Bonneville Dam over the last 10-years**[ii].
- **In 2014, a record 2.7 million adult salmon and steelhead passed Bonneville Dam.** This is the largest number of fish passing the dam since it was built in 1938[iii].
- **Snake River salmon have made a tremendous recovery**. In 1990 only 78 ESA-listed fall chinook returned to the Snake River. After significant improvements in ocean conditions, fish passage survival at dams and in improvements in habitat in the Snake River Basin over 61,000 fish returned in 2014. The current ESA recovery goal for this population is 3,000 wild fish[iv].
- **The Snake River population of coho salmon was considered functionally extinct by the early 1990s. After fish passage and habitat improvements and increased hatchery augmentation, over 15, 000 passed into the Snake River in 2014**[v]**.**
- **Sockeye returns past Bonneville Dam reached an all-time high.** A record 614,179 sockeye passed the dam in 2014. The prior record of 515,668 was set in 2012. The 10-year average at Bonneville is now almost 250,000 sockeye.[vi]

The 2008/2010 Federal Columbia River Power System (FCRPS) Biological Opinion (BiOp) Showing Impact on Fish and Wildlife

Salmon returns are improving in part due to the FCRPS Biological Opinion, a mitigation plan required by the Endangered Species Act (ESA) because the operation of the FCRPS has an effect on ESA-listed fish. Its measures are instrumental in protecting fish in the brief part of their lifecycle spent in the Columbia River Basin. Many of the mitigation actions in the BiOp are funded in large part by consumer-owned power customers of BPA.

How the BiOp Improves the River for Fish

- Due to surface passage and other dam improvements, all dams tested to date are **on track to meet the 96% (spring migrants) or 93% (summer migrants) juvenile dam passage survival performance standards**.[vii]
- **Action Agencies expect to meet habitat improvement targets for all fish populations by 2018.**[viii]
    - Over 177,000 acre feet of water have been protected to improve flows in fish habitat
    - About 206 miles of stream habitat have been improved.
    - Over 247 fish screens have been installed.
    - Over 6,800 acres of fish habitat have been improved
    - Over 2,000 miles of fish habitat have been made accessible.
    - Over 3,700 acres of estuary habitat have been restored or protected.
- Predator management plans have been implemented to reduce predation on salmon and steelhead by birds, fish and sea lions.

Regional Investment in the BiOp

- The BiOp is the most comprehensive and expensive effort to protect ESA listed species in the United States. **State and tribal funding agreements** with the Action Agencies to support BiOp work **total approximately $1 billion over the ten-year period of the BiOp**.[ix]
- **Overall fish mitigation** for this period will be much larger than that, with regional ratepayers funding the mitigation effort (of which the BiOp is a large part) at **approximately $700 million annually**.[x]

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[i] Columbia River DART http://www.cbr.washington.edu/dart/adult.html.
[ii] Columbia River DARThttp://www.cbr.washington.edu/dart/adult.html.
[iii] 2014 Joint Staff Report: Stock Status and Fisheries for Spring Chinook, Summer Chinook, Sockeye, Steelhead, and Other Species, and Miscellaneous Regulations. Joint Columbia River Management Staff, ODFW and WDFW; January 21, 2015. http://wdfw.wa.gov/publications/01569/wdfw01569.pdf
[iv] NOAA-F 5-Year Review of http://www.nmfs.noaa.gov/pr/pdfs/species/snakeriver_salmonids_5yearreview.pdf
[v] Columbia River DART http://www.cbr.washington.edu/dart/adult.html.

[vi] Columbia River DART http://www.cbr.washington.edu/dart/adult.html.

[vii] 2013 Draft Comprehensive Evaluation. Federal Action Agencies; July 16, 2013 http://www.salmonrecovery.gov/BiologicalOpinions/FCRPSBiOp/ProgressReports/2013ComprehensiveEvaluation.aspx
[viii] *Id.*
[ix] Bonneville Power Administration (information provided to customers).
[x] *Id.*

APPA American Public Power Association
SEVENTY-FIVE YEARS
ISSUE BRIEF March 2015

Municipal Bonds and Public Power

Summary

For more than 200 years, state and local governments and governmental entities, including public power utilities, have relied on municipal bonds as a means of financing. Nearly three-quarters of all core infrastructure built in the U.S. is financed with municipal bonds. Since the inception of the federal income tax in 1913, interest paid on these bonds has been exempt from federal tax, just as federal bonds, bills, and notes are exempt from state and local taxes. With the federal government facing severe fiscal challenges—seeking to reduce annual budget deficits while also lowering marginal income tax rates—several policymakers have proposed reversing this 100-plus year precedent. Doing so would simply shift the federal government's budget problems to state and local governments and, in the case of public power utilities, hurt critical investments in power generation, energy efficiency, safety, security, and emissions controls, while increasing costs for customers.

Background and History

The first recorded municipal bond was issued in 1812. Today, there are $3.7 trillion in municipal bonds outstanding, with more than $200 billion funding new projects every year. Close to five percent of those issuances (as much as $11 billion every year) finance new investments in power generation, distribution, reliability, demand control, efficiency, and emissions control: all needed to deliver safe, affordable, and reliable electricity.

In addition to infrastructure for public power utilities, these bonds finance roads, bridges, sewers, hospitals, libraries, schools, town halls, police stations, and every other sort of government-purpose investment made by state and local governments. In fact, nearly three-quarters of the infrastructure investment in the U.S. is financed by state and local government bonds.

Since the creation of the federal income tax in 1913, interest on government purpose municipal bonds has been excluded from federal income tax. This dates back to a series of Supreme Court decisions in the 1800s concluding first, that a state tax on a federal enterprise inherently violated the Constitution and, second, that a federal tax on municipal bond interest likewise would be unconstitutional. Subsequently, the Supreme Court has given the federal government the right to regulate government purpose municipal bonds—for example, requiring issuers to register bonds for the interest to be exempt from tax—and to tax the interest on bonds determined not to be for governmental purposes. By way of example of the latter, the 1986 Tax Reform Act substantially revised the tax treatment of private activity bonds.[1] In 1988, a slim Supreme Court majority found that municipal bonds could be taxed. Given that the issue was not in question in the case and that Congress has subsequently been unwilling to overturn decades of precedent, the tax treatment of government purpose bonds has not changed.

Strengths and Benefits of Municipal Bonds

State and local governmental entities—including public power utilities—have limited means to raise funds for their communities' capital needs. The municipal bond market gives close to 42,000 governmental issuers access to investors. This is particularly important to the vast

1 Private activity bonds differ from government purpose municipal bonds in that they can be issued by a state or local government to finance certain private projects. Interest on qualifying private activity bonds is exempt from regular federal income tax, but subject to the federal Alternative Minimum Tax (AMT). The volume of private activity bonds that can be issued in a state is subject to an annual cap. While power generation and distribution are among the qualified private activity bond activities, other restrictions and considerations make the use of tax-exempt private activity bonds rare for such purposes. Of 1,150 municipal bonds issued for public power projects from 2007-2011, just 30 were private activity bonds.

majority of small towns, counties, cities, and publicly owned utilities that issue municipal bonds. The median corporate bond issue is $210 million. Conversely, while roughly five percent of municipal bond issuances are for $200 million or more, the vast majority of municipal bonds, including for public power investments, are far smaller: the median municipal bond issuance is $7 million.

The federal tax exclusion of bond interest means issuers can finance their investments at reasonable rates. Over the last 20 years, the average yield of Standard & Poor's Corporate Bond (Aaa) Index has been 130 basis points higher than that of Moody's High-Grade Municipal Bond Index. Adjusting for the cost of call provisions common in municipal bonds, but rare in corporate taxable bonds, the spread is closer to 180 basis points. The difference can save municipal bond issuers 25 percent over the 30-year life of a project. These savings result in more critical investments in infrastructure and essential services by state and local governments and lower costs for the services they provide. Also, municipal bonds are ideally suited to finance capital-intensive and long-lived public infrastructure, such as the assets of a public power utility.

Investors purchase municipal bonds in part because of tax considerations, accepting a lower rate of return because the interest is exempt from federal income tax. Municipal bonds are also valued for their ability to generate a steady stream of revenue for fixed-income households. In 2012, 48 percent of all bond interest paid to individuals went to those with incomes of less than $250,000,[2] and roughly 72 percent went to those with income of less than $1 million.[3]

Recent market performance and the "flight to quality" underscore that municipal bonds are also valued as stable financial investments. Now 200-years old, the U.S. municipal bond market is well-established, with a robust and comprehensive federal legislative and regulatory system that protects investors. Likewise, municipal bonds themselves are typically extremely secure investment vehicles: the default rate for investment grade municipal bonds is effectively zero and, for all grades, is substantially lower than that for comparably rated corporate bonds.

2 Internal Revenue Service, "Statistics of Income—2010: Individual Income Tax Returns" (2012).

3 Ibid.

Congressional and Administration Actions—Threats to Municipal Bonds

Calls to tax municipal bonds to pay for federal income tax rate cuts or deficit reduction are on the rise. All would have the same effect: limiting or eliminating the income tax exemption for interest from municipal bonds would reduce investments in vital infrastructure across the country and increase the cost of electricity for public power customers. Ultimately, a disproportionate share of this burden will be shouldered by those who can least afford it.

The draft report of the President's Commission on Fiscal Responsibility and Reform (the "Bowles-Simpson" report) would tax interest on newly issued municipal bonds. It is unclear whether the taxable bond market could accommodate 12,000 municipal bonds issued every year and how smaller issuers—who would be dwarfed by the typical corporate issuer—would fair in the taxable market. Analyses show that the costs to municipal issuers would be significant: from 35 percent to 38 percent depending on the size of the issue. On average, public power municipal bonds finance as much as $11 billion in new projects every year. Repealing the exclusion for municipal bond interest would add an estimated $2.5 billion in borrowing costs over the life of each year's issuances. Ultimately those costs will be paid by public power customers in the form of higher electric bills.

The Obama Administration has proposed capping at 28 percent the tax value of the exclusion for municipal bond interest and other deductions and exclusions. This would have the effect of imposing a surtax on bond interest. An analysis of this proposal shows that it would increase borrowing costs by 32 to 35 percent. Moreover, the proposal would apply retroactively to $3.7 trillion of existing bonds -- an unprecedented and unfair tax that would cause instability in the municipal bond market. At the levels being discussed, a flat dollar cap on deductions and exclusions, if it included municipal bond interest, would be even worse, effectively repealing the income exclusion for most bond holders.

Former House Ways and Means Committee Chairman David Camp (R-MI) proposed his own 10 percent surtax on municipal bond interest, and former Senate Finance Committee Chairman Ron Wyden (D-OR) proposed repealing the exclusion for municipal bonds, partly replacing the exclusion with an income tax credit available to individuals, but not corporations. Despite numerous efforts at creating workable tax credit bond

programs, they have had little acceptance among investors, and the prices that investors have been willing to pay for these bonds have resulted in tax credit bonds having their own inefficiencies that far exceed the purported inefficiencies of tax-exempt bonds.

The Congressional Budget Office (CBO) has proposed replacing the exclusion for municipal bonds with a direct cash subsidy from the federal government to issuers. Currently such "direct payment bonds" work as a complement to tax-exempt bonds, not a replacement. They could not, however, accommodate the 44,000 state and local governments that routinely participate in the municipal bond market, most of whom are very small issuers. As a result, many local governments would be shut out of the bond market. One analysis shows that total borrowing costs would increase by 16 percent if the direct payment bond were set at 25 percent of the issuer's interest expenses. A payment of 15 percent—as proposed by CBO—would raise $30 billion annually for the federal government primarily at the expense of bond issuers. Bond issuers would also be vulnerable to the annual budget process, as evidenced by the ongoing sequestration order for Build America Bond payments.

APPA Position

The American Public Power Association (APPA) believes that municipal bonds should be preserved and enhanced, and, as a result, the federal tax exclusion of the interest from such bonds should not be limited or replaced with a tax credit or direct payment subsidy. As not-for-profit, consumer-owned utilities, our members' mission is to provide reliable and affordable electricity for our customers. Taxing municipal bonds will impose higher borrowing costs that will limit investment in critical infrastructure and, ultimately, impose higher electric rates on our residential and business customers, with unclear benefits for purposes of the overall economy and federal budget. As a result, APPA opposes any effort to undermine this important financing tool.

APPA Contacts

John Godfrey, Government Relations Director, 202-467-2929 / jgodfrey@publicpower.org

Joy Ditto, Senior Vice President, Legislative & Political Affairs, 202-467-2954 / jditto@publicpower.org

Public Power Council
825 NE Multnomah, Suite 1225
Portland, OR 97232
(503) 595 - 9770
www.ppcpdx.org

PPC and Consumer-owned Power in the Northwest

February 2015

The Public Power Council serves a unique role as the forum where consumer-owned electric utilities come together to create consensus and advocacy on issues impacting regional power supply. Since 1966, the PPC has represented the interests of the consumer-owned utility customers of the Bonneville Power Administration in all BPA-related matters. PPC brings technical capability to the table with a team of experts in utility law, power systems, economics, and government affairs.

Membership in PPC is open to all "preference" customer electric utilities in the Columbia River Basin. The utilities range in size from 10 to 400,000 customers, and are located in parts of seven western states–Washington, Oregon, Idaho, Montana, Nevada, Utah and Wyoming.

These utilities are public or peoples utility districts, municipal, cooperative, or mutual organizations. Collectively, they are often referred to simply as "publics," "public agencies," "public power," and "publicly owned utilities." They have varying legal structures, but they are all consumer-owned, nonprofit, and locally controlled.

In recognition of the crucial role electricity plays in modern life, consumer-owned utilities reflect two important principles. First, local citizens have a right to own and control the means necessary to provide electricity for their communities. Second, a community availing itself of this right to ownership and control has an obligation to do so reliably, efficiently and *at cost*.

Community Priorities

Community ownership of electric service means local people working together to meet local needs. In the Northwest, consumer-owned power energizes the most remote rural areas and lights the largest urban centers. It powers large industrial operations, small residential dwellings, and everything in between.

The public invests its trust in consumer-owned utilities and they in turn take on an obligation to help advance the values in their community. Among these values today are energy efficiency, stewardship of the environment, and community service.

Public power plays a major role in the Northwest's decades-long reputation as a national leader in the area of conservation. In their own service territories and in partnership with other organizations and agencies in the region, publicly owned utilities offer aggressive conservation programs and they continue to explore new technologies and build new paths to deliver cost-effective and innovative energy efficiency measures and services.

Consumer-owned utilities are committed to developing clean and renewable resources to augment the hydroelectric backbone of the region's electricity system. They have invested in wind energy and hydro power upgrades, and some have been active in emerging technologies like solar and tidal power. Many also offer their customers a billing option that helps to fund more renewable energy development.

Public power also makes an enormous investment annually in protecting the region's fish and wildlife resources. The Bonneville Power Administration (BPA), which supplies wholesale power to most publics, spends hundreds of millions of public power customers' dollars every year on its fish and wildlife program. In addition, many individual utilities make direct expenditures for fish and wildlife enhancement, not to mention for clean water, habitat protection and environmental awareness and education.

A spirit of community service is fundamental to public power's nonprofit, local-control philosophy. Nearly all regional public utilities offer a range of programs such as helping low income customers to pay their bills and weatherize their homes. Many have educational and grant programs that supplement the work of local school districts.

Consumer-owned Utilities and Preference

As entities owned by the citizens and providing benefit to the public, consumer-owned utilities have a legal first right to federal power. They are afforded this priority access to federal power generation and transmission through a legal principle called "public preference." Most members of PPC buy much or all of their power from the Bonneville Power Administration (BPA), whose key mission is to deliver the clean, renewable hydropower that is generated at federal dams to the region's nonprofit, consumer-owned electric utilities.

Preference was first applied to consumer-owned electric systems in the Reclamation Act of 1902, which gave municipalities preferred access to surplus power from federal irrigation projects. Congress granted preference to ensure that the benefits of federal power were passed through to the public at the lowest possible cost, something only consumer-owned utilities could assure. Another reason was to help extend these benefits to the remote areas of the nation served only by consumer-owned utilities. And, preference was a means of preventing the monopolization of federal power by private interests.

Public preference is emphasized in the 1937 Bonneville Project Act, which authorized completion of Bonneville Dam, creation of BPA, and the construction of federal power lines to transmit the power as widely as practicable. The Bonneville Project Act specifically declares that preference be provided to publicly owned systems to ensure that hydropower projects are operated for the benefit of the general public, particularly residential and rural customers. These principles are just as relevant today, and the preference rights have been affirmed in subsequent laws impacting the Northwest power system, such as the Regional Power Act passed in 1980 ("Pacific Northwest Electric Power Planning and Conservation Act").

PPC Members 2015

COOPERATIVES

Blachly-Lane County Electric Cooperative, *Oregon*
Central Electric Cooperative, *Oregon*
Clearwater Power Company, *Idaho*
Columbia Rural Electric Assoc., *Washington*
Consumers Power, Inc., *Oregon*
Coos-Curry Electric Cooperative, *Oregon*
Fall River Electric, *Idaho*
Flathead Electric, *Montana*
Glacier Electric Cooperative, *Montana*
Harney Electric Cooperative, *Oregon*
Hood River Electric Cooperative, *Oregon*
Idaho County Light & Power, *Idaho*
Inland Power & Light, *Washington*
Kootenai Electric Cooperative, *Idaho*
Lane Electric, *Oregon*
Lincoln Electric, *Montana*
Lost River Electric Cooperative, *Idaho*
Midstate Electric Cooperative, *Oregon*
Missoula Electric Coop, *Montana*
Okanogan County Electric Coop, *Washington*
Oregon Trail Elec. Cooperative, *Oregon*
Peninsula Light Company, *Washington*
Raft River Electric, *Idaho*
Ravalli County Electric Cooperative, *Montana*
Salem Electric, *Oregon*
Umatilla Electric, *Oregon*
United Electric, *Idaho*
Vigilante Electric Cooperative, *Montana*
Wasco Electric, *Oregon*
West Oregon Electric, *Oregon*
Wells Rural Electric Cooperative, *Oregon*

MUNICIPALS

City of Ashland, *Oregon*
City of Bandon, *Oregon*
City of Blaine, *Washington*
City of Bonners Ferry, *Idaho*
Canby Utility, *Oregon*
City of Cascade Locks, *Oregon*
Centralia City Light, *Washington*
Cheney Electric Service, *Washington*
Eugene Water & Electric Board, *Oregon*
City of Forest Grove, *Oregon*
Idaho Falls Power, *Idaho*
McMinnville Water & Light, *Oregon*
Milton-Freewater City Light & Power, *Oregon*

Municipals (cont.)

Monmouth Power & Light, *Oregon*
Richland Energy Services, *Washington*
Port of Seattle, *Washington*
Rupert Electric Dept., *Idaho*
Seattle City Light, *Washington*
Springfield Utility Board, *Oregon*
City of Sumas, *Washington*
Tacoma Power, *Washington*
Vera Water & Power, *Washington*

PUDs

Asotin PUD, *Washington*
Benton PUD, *Washington*
Central Lincoln PUD, *Oregon*
Chelan County PUD, *Washington*
Clallam County PUD, *Washington*
Clark Public Utilities, *Washington*
Clatskanie PUD, *Oregon*
Columbia River PUD, *Oregon*
Cowlitz PUD, *Washington*
Emerald PUD, *Oregon*
Ferry County PUD, *Washington*
Franklin PUD, *Washington*
Grant County PUD, *Washington*
Grays Harbor PUD, *Washington*
Jefferson PUD, *Washington*
Kittitas County PUD, *Washington*
Klickitat PUD, *Washington*
Lewis County PUD, *Washington*
Mason County PUD #1, *Washington*
Mason County PUD #3, *Washington*
Northern Wasco PUD, *Oregon*
Okanogan PUD, *Washington*
Pacific County PUD #2, *Washington*
Pend Oreille PUD, *Washington*
Skamania County PUD, *Washington*
Snohomish County PUD, *Washington*
Tillamook PUD, *Oregon*
Wahkiakum PUD, *Washington*
Whatcom County PUD #1, *Washington*

TRIBAL-OWNED

Yakama Power, *Washington*

MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO: Commissioners Mital, Simpson, Helgeson, Manning and Brown

FROM: Mel Damewood, Engineering Manager and Dean Ahlsten, Compliance Officer

DATE: February 20, 2015

SUBJECT: Rate Adjustment for Dark Fiber Lease

OBJECTIVE: Information Only

Issue Statement

In accordance with the provisions of Board Resolution No. 1304 which established a Dark Fiber Lease Rate in 2013 (DFL-1), the rate is adjusted annually based on the City of Portland Consumer Price Index (CPI); the implementation date is April 1 each year. EWEB's current 'public purpose' rate (public agencies, higher education and medical service providers) is $21.72 per fiber strand-mile per month. The 2014 CPI has not been published but it is projected to be in the 3% range.

Background

EWEB Fiscal Services staff periodically conducts a cost of service analysis and updates EWEB's Dark Fiber rate. This was last done in August 2010 to facilitate the connection of approximately twenty-five new customers in 2011/2012 utilizing funding from a federal Broadband Technology Opportunity Program (BTOP) grant awarded to Lane Council of Governments (LCOG). When the new DFL-1 rate was approved and published in Customer Policies and Procedures in 2013, all existing and new customers were put on that common rate, as opposed to continuing individual and varied rates based on pre-existing contracts.

Discussion

EWEB's DF rate consists of three components: Capital Cost Recovery; Capital Reserve; and Operations & Maintenance expense. The 'public purpose' rate includes all three components; while School Districts 4J, Bethel and Springfield rates contain only the O&M component. EWEB also offers a DF lease rate for commercial telecommunication service providers and other for-profit companies which is approximately double the public purpose rate. All three rates will be adjusted per the City of Portland CPI as shown:

Customer Group	Current DF Rate	Projected April 1, 2015 DF Rate
Public Agencies DFL-1	$21.72 per fiber strand-mile month	~$22.37 per fiber strand-mile month
School Districts	$4.78 per fiber strand-mile month	~$4.92 per fiber strand-mile month
For-Profit Companies	$44.40 per fiber strand-mile month	~$45.73 per fiber strand-mile month

Recommendation and Requested Board Action

Pursuant to past Board action, the rates listed above will automatically become effective on April 1, 2015 with actual CPI-Portland escalation. Because the index has not been published as of the February 20 Board Run date and because the next Board meeting will not occur until after these rates become effective, Management wanted to ensure the Board was aware of these coming rate changes. Actual rates will be communicated to the Board as follow-up once the CPI-Portland index is published.

There is no recommendation or requested Board action.

Please contact Mel Damewood at 685-7145 or e-mail at mel.damewood@eweb.org with questions.